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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/398,274 09/20/99 BROWN J 9921

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LM02/0113

EXAMINER

LIEU, J

ART UNIT

PAPER NUMBER

2736

DATE MAILED:

01/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/398,274

Applicant(s)

BROWN, JEFFREY C.

Examiner

Julie Lieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rakow (US Patent No. 5,150,098).

Claim 1:

In reference to fig. 4, Rakow discloses an apparatus for indicating the intensity of brake pressure application in a vehicle having an electrical system and a brake light and brake pedal comprising:

- a. Means 42 for measuring the intensity of brake pressure applied to the brake pedal
- b. Means 46-48 for providing output signal
- c. A plurality of lights 18, 19, 21 sequentially illuminated in response to the output signal (col. 3, last paragraph).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rakow (US Patent No. 5,150,098) in view of Gilmore (US Patent No. 5,610,578) (cited by the applicant).

Claim 2:

Rakow uses the detected hydraulic pressure value to determine the intensity of the pressure applied to the brake. However, there are different ways of detecting the brake pressure known in the art such as that taught by Gilmore. Gilmore measures the brake pressure by measuring the resistivity of between the contacts of the pedal potentiometer. In light of this teaching, it would have been obvious to one skilled in the art, at the time the invention was

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made, to recognize using the brake pedal potentiometer in place of sensor 42 in Rakow because it would eliminate the use of a sensor which is more costly than the use of the potentiometer.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rakow (US Patent No. 5,150,098) in view of Gilmore (US Patent No. 5,610,578) (cited by the applicant) as applied to claim 2 above and further in view of Eckert et al. (US Patent No. 4,888,997)

Claim 3:

Neither Rakow nor Gilmore discusses using a strain gauge sensor. However, the use of a strain gauge sensor for sensing the expansion of a brake hose in response to the intensity of a brake pressure is well known in the art as shown in Eckert et al. (col. 2, lines 50-56). Therefore, it would have been obvious to one of ordinary skill in the art to use a strain gauge sensor in place of the sensors in Rakow or Gilmore depending on the brake type because measuring of brake pressure by strain gauge is conventional in the art.

6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakow (US Patent No. 5,150,098).

Claim 4:

Though not clearly mentioned in Rakow, it would have been obvious to one of ordinary skill in the art that any vehicle would have some kind of switch connected to the electrical system and actuated by movement of the brake pedal for providing electrical current to

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illuminate the brake light. Thus, this switch would also provide electrical current to illuminate the brake intensity indicators.

Claim 5:

The examiner takes official notice that the use of light emitting diodes in brake light system is conventional in the art. Therefore, it would have been obvious to one of ordinary skill in the art to substitute LEDs for light bulbs 18, 18, 21 in Rakow because LEDs would consume less power and provide an aesthetic indicating system.

Claim 6:

The lights in Rakow is arranged horizontally in the rear of the vehicle. However, arranging the lights vertically only present a design choice. Lacking any criticality as to why the indicator lights must be arranged vertically, what unexpected result would be obtained, or how it would solved any stated problem, it appears that the lights, arranged horizontally, in Rakow would function equally well as if it is mounted vertically to provide the following drivers with the information of the intensity of the brake pressure of the leading vehicle.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 703-308-6738. The examiner can normally be reached on Mon-Fri, alternate Fri. off, 8:30-6:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 703-305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-6743 for regular communications and 703-308-6743 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-8576.

A handwritten signature in black ink, appearing to read "Julie Lieu". The signature is written in a cursive, flowing style.

Julie Lieu
Primary Examiner
Art Unit 2736

jl
January 6, 2000